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ABSTRACT

In order to investigate characteristics of the implementation of objective-based approaches to reading instruction and to isolate problems in such implementations, a questionnaire was sent to over 100 schools that were implementing the Wisconsin Design for Reading Skill Development. Responses from 61 school districts were used to obtain information about the proportion of schools implementing various elements of the Wisconsin Design; the proportion of students using the program at each grade level; the combinations of skills implemented; the major steps in the implementation cycle and the people responsible for implementing those steps; the function of the word-attack element in the overall program; the instructional approach used with the Wisconsin Design word-attack element; the success of implementation; the impact on the teaching of reading; major problems; and major advantages identified by the schools. The findings were interpreted as indicating that the more "successful" schools had implemented the system for a length of time sufficient to overcome problems that often appear during the first year and that success of implementation was dependent on teacher involvement, dedication, and enthusiasm. (AA)

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# AN OBJECTIVE-BASED APPROACH TO READING INSTRUCTION: IMPLEMENTATION AND EVALUATION

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AN OBJECTIVE-BASED APPROACH TO READING INSTRUCTION: IMPLEMENTATION AND EVALUATION


ABSTRACT

Educators have recognized that effective reading instruction must focus on each individual student's strengths and weaknesses. Likewise, they realize that teaching reading to individual students in a one-to-one situation is an unrealistic goal. One result of the search for better methods of teaching reading has been the development of the objective-based approach to reading instruction. Based on the theory that the acquisition of competence in reading depends on the mastery of subskills, the objective-based approach has received attention from both advocates and critics of this theory. Many studies have been completed and are in progress to investigate the validity of the subskills approach. While these studies are being done, however the objective-based approach to reading instruction is being implemented in classrooms. Therefore, a more pressing need at the present time is for research to investigate the effectiveness of implementation of this approach in the classroom. The purpose of this study is to investigate characteristics of implementation and to isolate problems in implementing an objective-based approach to reading instruction. Because many objective-based programs share similar components, the Wisconsin Design for Reading Skill Development (the Design) was selected as the vehicle for studying this approach.

A questionnaire was sent to over 100 schools implementing the Design. Based on the response received from 61 school districts across the country, several characteristics of schools implementing this management system were identified.

The questionnaire is the first step in a more extensive study in which schools implementing the Design will be observed and teachers will be interviewed. The findings from this intensive study will be shared with those involved in the implementation of any objective-based approach. Hopefully, one consequence of this study will be to encourage teachers and administrators to initiate their own evaluations of the reading programs in their schools.

# AN OBJECTIVE-BASED APPROACH TO READING INSTRUCTION: IMPLEMENTATION AND EVALUATION

## Purpose

This study is the first step in an intensive investigation of implementation of an objective-based approach to reading instruction. The study was designed to (1) identify characteristics and procedures common to schools implementing an objective-based approach; (2) identify attitudes toward implementing an objective-based approach; (3) identify procedures, devices, and techniques that are successful in different situations; and (4) identify schools that have evaluated the effectiveness of an objective-based approach.

## Rationale

Effective reading instruction must focus on each individual student's strengths and weaknesses. Many studies investigating the reading abilities of individuals and groups have been reported. Based on the results of these studies, Otto and Smith (1970) concluded:

> (1) The acquisition of reading skills is a highly personal process that is sensitive to many interacting factors, and (2) it is difficult, for a number of reasons, to generalize about the reading ability of groups of children. While these generalizations may be disconcertingly nonspecific, they do point up the need to look with caution at groups and with extreme care at individuals [p.6].

Just as educators have begun to realize that reading instruction must be individualized, they also recognize that teaching reading to individual students in a one-to-one situation in a classroom of 35 youngsters is an unrealistic goal. One of the most recent results of the search for better ways to individualize reading instruction effectively and realistically is the objective-based approach to reading instruction, sometimes referred to as a skill-based approach, a skills monitoring system, a skills management

system, or a criterion-referenced system. Proponents of this approach believe that teachers who attempt to focus their reading instruction to meet the needs of individual students and to build on their strengths must begin with specific skills defined in terms of clearly stated objectives. Because this approach focuses on the acquisition of specific reading subskills, it has received much attention from both the advocates and the critics of the subskill approach. Critics have raised many questions: Should the reading act be fractionated into tiny parts, i.e., subskills? Is there a reading skills hierarchy? Are the criterion-referenced tests that are used to determine mastery valid? What is "mastery"? Does an objective-based approach to reading produce readers who want and like to read? The critics' viewpoint can be summarized in this statement my Johnson and Pearson (1975):

> In principle, Skills Management Systems may be the ideal alternative for assessing student progress in reading. But, until some basic research and evaluation of the systems is conducted, they must be viewed only as one of many alternatives (and a very expensive and time consuming one, at best)[p. 763].

Because of these questions and concerns, researchers have been investigating the whole area of skills instruction. The purpose of some research studies has been to determine what skills are prerequisites to competence in reading (McNeil, 1974; Carducci-Bolchazy, 1975). Other researchers have investigated the functional word attack ability of students instructed with an objective-based approach (Kurth, 1975). The National Institute of Education (1975) proposed a framework for research dealing with reading skills and reading skills hierarchies. Although this type of research is being done and probably will continue as long as people are concerned with reading acquisition, there are several practical issues that need to be addressed now: Is a skill-based approach manageable in a classroom of 35 youngsters, i.e., can a teacher

implement an objective-based approach in a classroom without getting "bogged down" with testing, grouping, and regrouping? What types of reading skills (e.g., word attack skills, comprehension skills, or study skills) are most frequently stressed in classrooms? Do schools implement an objective-based approach with educationally handicapped children? What implementation steps are followed most consistently and who is responsible for carrying out each step? How do school personnel incorporate a management system into their curriculum? Are schools doing their own research to evaluate the effectiveness of an objective-based approach? Several skills management systems are available commercially for teachers at the present time. The need to answer these questions concerning effectiveness of implementation becomes more critical as more and more of these systems appear in classrooms. This study was the first step in an attempt to investigate implementation of an objective-based approach to reading instruction.

## Procedures

Although there are a number of objective-based approaches, most of them share similar components. Johnson and Pearson (1974, pp. 757-758) describe these components:

1. a sequentially ordered set of behavioral objectives for the various reading skills monitored,
2. a set of tests with one or more items to measure each objective,
3. rules for deciding what level of achievement constitutes mastery of each objective,
4. resource files which recommend specific workbook pages, books or other instructional materials which can be used to provide instruction in the skills which have not been mastered, and

5. a method of reporting to teachers, parents and others which children have and have not mastered which objectives.

Because these systems do share similar components, one system, the Wisconsin Design for Reading Skill Development (the Design)(Otto & Askov, 1974), was selected to serve as the vehicle for this investigation. To acquire the information needed to meet the four purposes, a questionnaire was developed and sent, along with a letter explaining the purpose of the research, to school personnel in over 100 schools in about 30 states. The questionnaire provided a means for learning about many of the characteristics of the identified schools: (1) the overall organization of each school; (2) the instructional elements (i.e., Work Attack, Study Skills, Comprehension, Self-Directed, Interpretive, and Creative Reading) implemented at each level in a school; (3) how consistently the suggested steps in the implementation cycle are carried out at each level; (4) how each element fits into the total reading program as well as into other content areas; and (5) the types of reading approaches (e.g., basal reader, individualized, language-experience) used with the Design. The data from the questionnaires were analyzed in terms of the purposes identified. If more information was needed in addition to the data from the questionnaires, the respondents were telephoned.

Limitations

The analysis of the data and, therefore, the interpretations that are made are limited by several factors. Because the major purpose of the questionnaire is to identify schools to study more intensively, the sample was not selected randomly. The first 100 schools were selected at random; however as other schools implementing the Design were identified, questionnaires were sent to the school personnel if they showed interest in answering the questions.

The interpretation of results is also limited by problems encountered in using the questionnaire technique. Although the structure of the response format minimized the amount of writing required from the respondents, the questionnaire was quite long and many school personnel could not take the time to complete such a lengthy questionnaire. This is one of the reasons that the percentage of return was very small. Secondly, even though precautions were taken to structure the questions carefully, there is still the possibility that some questions were interpreted differently by different respondents and, as a result, answers to these questions were based on different types of information. A third limitation is that all respondents did not respond to every question. The result was a different number of responses to various questions.

## Analysis

Sixty-one questionnaires representing 22 different states were returned and the data were anlayzed in terms of the four major purposes of the study: (1) to identify the characteristics and procedures common to schools implementing an objective-based approach; (2) to identify attitudes toward implementation of an objective-based approach; (3) to identify procedures, devices, and techniques that have contributed to success in different situations; (4) to identify schools that have evaluated the effectiveness of an objective-based approach.

## Common Characteristics and Common Procedures of Schools

School organization. The Design is compatible with the principles of Individually Guided Education (IGE) which is a system of education that attempts to individualize instruction by providing for differences in

children's rates of learning and modes or styles of learning (Klausmeier, Rossmiller, & Saily, 1977). Although the Design and IGE are based on the same model, the Design is not dependent on IGE, and IGE can function in a school that does not implement the Design. School personnel were asked to classify their school as either an IGE school or a non-IGE school. Nineteen of the respondents or 31 percent considered their schools to be IGE while 35 of the respondents or 57 percent labelled their schools non-IGE schools. Seven schools did not respond to the question.

Elements implemented. As shown in Table 1, 60 schools out of the 61 (98 percent) implement the Word Attack element of the Design, 35 schools (57 percent) implement the Study Skills element, 28 schools (46 percent) implement the Comprehension element, and 10 schools (16 percent) implement the Self-Directed, Interpretive and Creative Reading elements. Of the schools reporting

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Insert Table 1 about here

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numbers of students involved, approximately 14,781 or 50 percent of the total were being instructed in Word Attack while approximately 7,197 (24 percent) were working with the Study Skills element, and 7,840 (26 percent) were being instructed with the Comprehension element. The greatest number of students is involved in the Word Attack element with the largest concentration in grades 1-3. With the exception of kindergarten, the number of students involved in Word Attack decreases as the grade level increases. The greatest number of students working in Study Skills is concentrated at grades 4-6. The number of students working with Comprehension is distributed evenly across all seven levels.

Implementation of Design skills by individual element and combinations of elements is shown in Table 2. As depicted in the table, about 50 percent

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Insert Table 2 about here

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of the schools implement either Word Attack only or the Word Attack and Study Skills combination. Of the 44 schools implementing more than one element approximately 75 percent implemented only the Word Attack element first and then implemented the other elements at a later time. Four schools implemented Word Attack first but indicated that another element was implemented at the same time. One school implemented the Comprehension element in the intermediate grades and then implemented Word Attack in the primary grades a few months later.

Implementation procedures. The respondents were asked to respond to the fourteen suggested implementation steps in terms of consistency in carrying out each step and identifying the person responsible for each step. In 13 of the 14 steps, approximately 70 percent of the respondents said that they carry out the steps consistently for all of the elements. Step 11 which involves assessing the progress of each child toward the skill being taught and assigning the child who appears to have grasped the skill to join other children who are engaged in independent work is carried out consistently by only 36 percent of the respondents in Word Attack and by only 47 percent of those in Study Skills. Thirty-two percent of those implementing Comprehension responded that they did not attempt Step 11 at all. Table 3 shows 6 of the

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Insert Table 3 about here

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most common 14 steps that are followed in many objective-based approaches, the consistency of implementation among the schools responding, and who is

responsible for carrying out each step. The data indicate that the teacher is the person most often responsible for carrying out the steps while aides are also involved in completing many of the tasks. In many schools, the respondents indicated that a combination of people were involved in completing a task. For example, the teacher with the help of the aide might be responsible for completing Step 1--Administering Break-in Tests.

Implementation with educationally handicapped. Forty-one out of the 61 schools, or 67 percent responding, indicated that the Design is used with educationally handicapped children. The greatest percentage use the Design with children who are classified as being either learning disabled or reading disabled. At least half of the schools using the Design with handicapped children indicated that they mainstream these children. The most frequent comment was that teachers find that success is slow but sure when the Design is used with educationally handicapped children. This comment seems to summarize the generally positive attitudes toward implementing this management system with educationally handicapped children:

> The Design provided a systematic approach for 6 to 10 year olds in our Special Class--50-75 I.Q.--assigned by the clinical psychologist, tested only by Binet or WISC. The teachers felt this to be the first time they had a structured continuum of skills. However, a plateau is reached at times when rate must become very slow. Much repetition and application is needed to make further progress.

Implementation in the total reading program. Table 4A shows how the schools responding incorporate the Design Word Attack element into the total reading program. The Design Word Attack element is the basis for skill instruction

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Insert Table 4A about here

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in 23 of the schools responding. The Design Word Attack element is used as a monitor of skill instruction in 14 of the schools. Twenty of the schools

responded that the Design is implemented as a combination of a basis for reading instruction and as a monitoring device. Only 21 schools incorporate Word Attack into the usual reading time while 34 implement Word Attack at a specific time separate from the usual reading time.

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Insert Table 4B about here

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Respondents were asked to indicate the type of reading instruction approach that was used with the Design. Fifty schools indicated that the basal reader approach either alone or in combination with another approach is used with the Design. As shown in Table 4B, the most commonly used basal readers were Ginn, Houghton-Mifflin, Macmillan, and Lippincott. Twenty-three schools indicated that some type of individualized approach was used while nine schools indicated that the language experience approach was used at some time during the elementary grades.

Of those schools implementing Study Skills, many respondents indicated that they form skill groups and instruct Study Skills within content areas. The specific content areas were social studies, math, reading, language arts, library, and science. In one school Study Skills instruction is alternated with the social studies units. Other teachers use the Study Skills element as an "exit vehicle" for grouping students who have completed the Word Attack element.

The Design Comprehension element is implemented in a variety of ways in different schools. Some teachers group children for comprehension skills just as they do for Word Attack. A few teachers use this element to monitor comprehension skills after instruction in the basal reading program.

Attitudes

Success of implementation. The respondents were asked to rate their success of implementation of each Design element as excellent, good, moderate, fair,

or poor. As Table 5 indicates, of the 50 who responded to the Word Attack

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Insert Table 5 about here

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element, 24 rated their success of implementation as excellent, 17 rated it as good, 7 as moderate, 2 as fair, and no one rated it as poor. Most of the written comments that were made suggested that implementation of Word Attack was successful and this success, according to some of the respondents, is linked to the length of time this element has been implemented. Several comments substantiate this: "Word Attack is simplest to organize and teach and we've had time to perfect it." "The Word Attack element has been in operation for nearly four years. It is pretty much institutionalized, everyone accepts it readily." "The higher rating for Word Attack is due to its being implemented earlier than the Study Skills element."

Of the 30 schools implementing the Study Skills element, 8 rated success of implementation as excellent, 11 rated it as good, 7 as moderate, 4 as fair, and none rated it as poor. The comments on Study Skills implementation tended to stress the difficulty of implementing this element. Again the length of time of implementation seems to have an effect on success of implementation as reflected in this comment: "Study Skills is relatively new, teachers are not entirely comfortable with it yet." Some respondents commented that there were so many skills in the Study Skills element and that teachers didn't have enough time to implement this element effectively. They also expressed a need for more material to teach the skills.

Of the 26 schools implementing the Comprehension element, only 5 rated their success as excellent, while 10 rated success as good, 7 as moderate, 3 as fair, and 1 as poor. Again few schools have implemented the Design Comprehension element for any length of time and many commented that it was too early to rate success with any degree of confidence.

Attitudes toward success of implementation of the Self-Directed, Interpretive, and Creative Reading elements, as shown in Table 5, were equally distributed across all five responses with 50 percent rating success as good to excellent and 50 percent rating success in the moderate to poor categories.

Overall general negative comments related to implementation tended to focus on the lack of time and lack of planning for application and reinforcement of skills. Some comments were made expressing the concern that children could not transfer the skills they had "mastered" to their other class work. The following comment summarizes this attitude: "My opinion (perhaps only mine) is that the program [the Design] does a great job--but student retention is not great. Perhaps that is the teacher's problem--perhaps some of these skills are not sufficiently reinforced in other areas."

Overall general positive comments related to implementation stressed that a management system had helped teachers understand reading instruction as well as the whole learning process. One respondent commented: "As we gain experience in the management of the Design, we find that we are learning more about individuals, and are better able to provide for them than was possible in the past. We feel that we have learned more about the learning process itself." Success seemed to be linked to teacher dedication as reflected in these comments: "As far as Word Attack and Study Skills are concerned we feel that teacher dedication to the Design has provided us with excellent implementation." "Every staff member undertook his task, since they were very instrumental in the steps leading to our adoption of the Design." In addition to teacher dedication, teacher understanding of the skills management system seemed important as stated by one respondent: "At the time of implementation, the staff agreed the management system would not manage them, instead they were determined to monitor their use of the system.

Through recommendations, evaluation, modifications/revisions, they have been successful in making the Design work for them and their students."

Impact of implementation on the teaching of reading. Table 6 shows how the respondents rated the impact the Design has had on teachers in their school and their teaching of reading. As shown in the table, 54 responded to this

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Insert Table 6 about here

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question with respect to the Word Attack element. Thirty-eight rated the Design as having a very positive effect, 14 rated it as having a slightly positive effect, 1 indicated no effect, and 1 responded that the Design had a negative effect. The reason for the "no effect" rating was that the teachers at this school feel that the Word Attack skills aren't transferred from the skill group to the reading act. The reason for the "negative effect" rating was that children in this particular school became so word oriented that they didn't develop comprehension skills properly. This respondent felt the Design element had caused overskill orientation. The positive ratings were substantiated by comments such as: "Achievement test scores have consistently risen every year in the elementary grades. I attribute much of this rise to the Word Attack element of the Design." "On individual student basis, basal reading has shown improvement . . . for students in the program [the Design] two years and six months, 76 percent are working at grade level in the basal reading program and 12 percent are above grade level."

Of the 31 respondents rating impact of the Design Study Skills element on the teaching of reading (Table 6), 19 rated the impact as very positive and 12 rated it as slightly positive. There were no "no-effect" ratings or "negative" ratings. These positive ratings are substantiated by such comments as this one: "Iowa Basics [Iowa Tests of Basic Skills] prove the effectiveness

[of Study Skills]. After two years of use the scores rated high compared to low scores of previous tests before [the] Wisconsin Design."

Fourteen of the 25 respondents rated the impact of the Design Comprehension element on the teaching of reading as positive, 10 rated it slightly positive, 1 indicated "no effect," and no one rated it as having a negative effect.

Of the nine rating the impact of the Design Self-Directed, Interpretive, and Creative Reading elements on the teaching of reading, three rated these elements as having a very positive effect, five rated them as having a slightly positive effect, one indicated that the three elements had no effect. Again, no one rated them negatively.

General comments concerning Design impact on the teaching of reading focused on the Design offering something concrete, a tool, which provides expectations for children. The Design has helped teachers realize that they need a skills continuum and that they cannot take skill mastery for granted. This comment summarizes the positive attitudes toward the impact of the Design on reading instruction:

> WDRSD was the unifying program for [our school] as we opened a new school with a new philosophy which combined three small neighborhood schools. The entire faculty began looking at the teaching of reading as a continuous, coordinated process. Intermediate teachers began asking primary teachers "What is a digraph?" or "How do you teach short vowels?" With a principal who is a strong leader, it opened a whole new world in individualization in the instruction of reading. The reading specialist fulfilled her true role of facilitator, coordinator, counselor, and supervisor of the total school reading program.

Implementation disadvantages. Based on data from an evaluation study of the Design Word Attack element (Hubbard, 1974) seven major problems associated with implementation of a skills management system were identified. The respondents were asked to check those that presented obstacles to their success in implementing this skills management system. Table 7 shows the seven

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Insert Table 7 about here

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problems and the frequency of responses to each. Lack of time for planning, testing, teaching, and record-keeping seems to be the major problem for most teachers and administrators. Other comments indicated that teachers needed more materials for teaching certain comprehension and study skills and that teachers do not have enough time during the school year to prepare these materials. Lack of sufficient personnel to carry out the various steps and to keep skill groups at a workable size is a problem also.

Implementation advantages. Nine major advantages were identified from the 1974 evaluation study. The respondents were asked to check those that they felt applied to their situation. Table 8 lists these advantages and the

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Insert Table 8 about here

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frequencies of responses. Since 60 of the 61 respondents implemented Word Attack the most frequently checked advantages were those dealing specifically with the Word Attack element. Advantages cited in the comments focused on the benefits of this skills management system for teachers as reflected in these reactions:

> "The Design provides follow through for instruction from year to year."
> "The Design provides opportunity for sharing and making materials."
> "The Design facilitates awareness of individual differences."
> "The Design provides strong organization--record-keeping."
> "The Design helps screen out advanced students and those with learning problems."
> "Teachers become more aware of the different learning styles of children."

Specific Successful Procedures, Devices, and Techniques

The respondents were asked to list specific implementation procedures or devices which they found to be most successful in their implementation of this skills management system. The most frequently mentioned technique that facilitated success was the involvement of all teachers at the beginning of

implementation and in all phases of development. Other specific procedures and devices are listed below:

1. Adequate inservice
2. A leader to keep control on progress of staff
3. Flexibility
4. Classroom charts
5. Learning centers
6. Summer projects to develop program
7. Free one teacher for a half day every two weeks to organize skill groups
8. Notebooks of lesson plans for teaching skills
9. Sequential scheduling
10. Accurate record keeping to pinpoint difficulties
11. Pretest periodically entire student body to avoid teaching unnecessary skills
12. Meet with and explain the program to all parents
13. Go slow. Look for interest on part of staff. A teacher sold on the program needs no further motivation
14. Use special area teachers to provide additional activities for students not completely involved in skill groups
15. Implement one area a year
16. Assign specific tasks to each teacher within a unit
17. One-half hour planning time per week
18. Aides cover classes for half days to free teachers to develop the Teacher's Resource Files for Word Attack
19. Setting up a diagnostic-prescriptive program that incorporates learning centers, activity cards, and multi-media centers to meet the skills needs of children
20. Provide teacher gripe sessions and sharing times. Allow teachers the opportunity to tell their problems and then attempt to solve the problems in the classroom. Provide an opportunity for teachers to share what they are doing in their classes
21. Wealth of material for teaching skills
22. Cooperative staff

Evaluation

Each respondent was asked whether or not anyone in the school or school district had conducted any type of evaluation of the Design in terms of usability, skill attainment, overall reading achievement, or cost effectiveness. Fifty-three schools responded to this question. Fifteen schools (28 percent) responded that they were in the process or had done some type of evaluation while 38 schools (72 percent) had not done any type of evaluation.

Implications

Knowledge of the major characteristics of schools implementing a skills management system, the common procedures used, the unique devices and techniques employed are important for schools already implementing such a system and for schools just beginning to implement. For those schools already implementing an objective-based approach, it is important for the personnel to look at the steps and to evaluate their system in terms of how consistently they carry out each step and who is responsible for completing each task. If the school is having problems with implementation, the staff might look at the data collected in this survey to determine what other schools are doing and how these other schools have overcome the same types of problems. In addition, in schools using an objective-based approach, the administrators might use the data as a basis for a small-scale evaluation of their implementation of the system. This evaluation could be a comparison between the characteristics, procedures, and attitudes found in a specific situation and those outlined in this study.

For those interested in extending or initiating an objective-based approach to include educationally handicapped children, the results of this small survey suggest that many schools use such a system with these children, and that these schools have found that it can be successful.

The results of this survey should be a help to teachers and administrators interested in initiating an objective-based approach to reading in their schools or school district. The information related to (1) the implementation steps and who is responsible for each step; (2) how each element is incorporated into the total curriculum in various schools; (3) the attitudes toward the implementation of a skills management system; (4) responses to problems and to advantages; and the (5) specific suggestions for successful techniques, procedures, and devices should facilitate the first decisions that need to

be made before implementation begins. For the school personnel making the decision of whether or not to implement a skills management system, a study of the major problems and major advantages might facilitate their decisions.

Two important generalizations can be made as a result of studying the data: (1) success of implementation is linked to length of implementation (i.e., the more "successful" schools have implemented the system for a sufficient length of time to overcome problems which often appear during the first year of implementation); and (2) success of implementation is dependent on teacher involvement, dedication, and enthusiasm.

One of the major purposes of the questionnaire was to determine how many schools have done some type of evaluation of the skills management system at the school or district level. As the figures indicate, only a small percentage of schools have attempted any type of evaluation. One of the major goals of this survey and of the more extensive study is to create an interest among school personnel in becoming involved in some type of evaluation effort.

If reading instruction is to be improved, strengths and weaknesses in the instructional program must be identified. Most important, the person or persons involved in the instructional program should be involved directly in its evaluation. Hopefully, one side effect of this investigation will be that teachers will become interested in evaluating their own reading instruction within their own classrooms. Ammons (1970) emphasizes the importance of teacher involvement in research:

> If one is not researching, one is not teaching in the best sense of both words. Therefore, to construct an imperfect syllogism, we need teachers who are conscious researchers. Further, research done apart from the teacher's own situation may not be directly applicable to that situation. . . . This means that as a teacher engages consciously in research and produces answers no matter how tentative to new questions in education, he enlarges his repertoire of knowledge, strategies and approaches to teaching in his own classroom [p. 35].

## Conclusion

In conclusion, many studies are being conducted to identify the essential reading skills, to determine how these skills fit into a skills hierarchy, and to assess the validity of criterion-referenced tests. Meanwhile many teachers in schools across the country are implementing objective-based approaches to reading instruction in their classrooms. Action research must be done to deal with the realities of teaching reading at the same time that the larger issues are addressed.

## References

Ammons, M. The Teacher as a producer of research and development products. In M. Vere De Vault (Ed.), Research, Development and the Classroom Teacher Producer/Consumer. Washington, D. C. The Association for Childhood Education International, 1970.

Carducci-Bolchazy, M. How necessary are certain skills for reading competence? Paper presented at the National Reading Conference, St. Petersburg, Florida, December, 1975.

Hubbard, W. D. Wisconsin Design for Reading Skill Development: Word Attack. Type II field test unpublished manuscript. Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974.

Johnson, D. & Pearson, P. D. Skills management system: A critique. The Reading Teacher, 1975, 28, 757-764.

Klausmeier, H. J., Rossmiller, R. A., & Saily, M. (Eds.), Individually guided elementary education: Concepts and Practices. New York: Academic Press, Inc., 1977.

Kurth, R. Evaluation of an objective based curriculum in Word Attack. Technical Report 289 for Cognitive Learning, Madison, Wisconsin: Wisconsin Research and Development Center, 1975.

McNeil, J. False prerequisites in the teaching of reading. Journal of Reading Behavior. 1974, VI(4), 421-427.

National Institute of Education. Conference on Studies in Reading, Report of Panel 10, Essential skills and skill hierarchies in reading. U. S. Department of Health, Education, and Welfare, Washington, D. C., June, 1975.

Otto, W. & Askov, E. The Wisconsin Design for Reading Skill Development: Rationale and guidelines (3rd ed.). Minneapolis: National Computer Systems, 1974.

Otto, W. & Smith, R. Administering the school reading program. Boston: Houghton-Mifflin Company, 1970.

NUMBER AND PERCENT OF SCHOOLS AND STUDENTS IMPLEMENTING DESIGN ELEMENTS

| ELEMENT | NUMBER OF SCHOOLS | PERCENT OF TOTAL SCHOOLS | NUMBER AND PERCENT OF STUDENTS AT EACH GRADE LEVEL USING DESIGN ELEMENTS GRADE | K | 1 | 2 | 3 | 4 | 5 | 6 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Word Attack (WA) | 60 | 98 | Number of students | 1515 | 3044 | 2903 | 2823 | 2082 | 1471 | 943 | 14,781 |
| | | | Percent of students | 10 | 21 | 20 | 19 | 14 | 1 | 6 | |
| Study Skills (SS) | 35 | 57 | Number of students | 284 | 909 | 887 | 1045 | 1425 | 1473 | 1174 | 7,197 |
| | | | Percent of students | 4 | 13 | 12 | 15 | 20 | 20 | 16 | |
| Comprehension (C) | 28 | 46 | Number of students | 873 | 1003 | 1155 | 1189 | 1217 | 1179 | 1224 | 7,840 |
| | | | Percent of students | 11 | 13 | 15 | 15 | 16 | 15 | 16 | |
| Self-directed, Interpretive and Creative Reading (SDIC) | 10 | 16 | | | | | | | | | |



TABLE 2

IMPLEMENTATION OF DESIGN SKILLS BY INDIVIDUAL ELEMENT AND COMBINATIONS OF ELEMENTS

| | WA ONLY | SS ONLY | C ONLY | SDIC ONLY | WA& SS | WA& C | WA& SDIC | WA& SS& C | WA& SS& SDIC | WA& SS& C & SDIC | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of schools | 16 | - | 1 | - | 15 | 8 | 1 | 11 | 1 | 8 | 61 |
| Percent of total | 26 | - | 2 | - | 24 | 13 | 2 | 18 | 2 | 13 | 100 |

TABLE 3

MAJOR STEPS IN IMPLEMENTATION CYCLE FOR WORD ATTACK, STUDY SKILLS, AND COMPREHENSION AND PERSON(S) RESPONSIBLE FOR IMPLEMENTING EACH STEP

| | Respondents Implementing Major Steps Within Each Element | | | | Person(s) Responsible for Implementing Major Steps Within Each Element | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. Resp. | Yes | Some-times | No | No. Resp. | Teacher | Aide | Stds. | IMC | Unit Ldr | Rdg. Person |
| 1. Break-in test | | | | | | | | | | | |
| Word Attack | 60 | 54<br>90% | 3<br>5% | 3<br>5% | 57 | 53<br>93% | 24<br>42% | | 1<br>2% | 9<br>16% | 3*<br>5% |
| Study Skills | 33 | 24<br>73% | 8<br>24% | 1<br>3% | 33 | 30<br>91% | 11<br>33% | | | 4<br>12% | 2*<br>6% |
| Comprehen-sion | 27 | 23<br>85% | 3<br>11% | 1<br>4% | 25 | 22<br>88% | 10<br>40% | | 1<br>4% | 4<br>16% | 2*<br>8% |
| 5. Record test results and notch pupil profile cards | | | | | | | | | | | |
| Word Attack | 57 | 55<br>96% | | 2<br>4% | 57 | 38<br>67% | 38<br>67% | | 3<br>5% | 6<br>11% | 5<br>9% |
| Study Skills | 34 | 32<br>94% | 1<br>3% | 1<br>3% | 35 | 26<br>74% | 18<br>51% | | 3<br>9% | 5<br>14% | 2<br>6% |
| Comprehen-sion | 27 | 27<br>100% | | | 27 | 17<br>63% | 18<br>67% | | 1<br>4% | 2<br>7% | 3<br>11% |
| 7. Use pupil profile cards to assign children to skill groups | | | | | | | | | | | |
| Word Attack | 58 | 53<br>91% | | 5<br>9% | 54 | 44<br>81% | 9<br>17% | | 4<br>7% | 14<br>26% | 6<br>11% |
| Study Skills | 31 | 28<br>90% | | 3<br>10% | 29 | 25<br>86% | 1<br>3% | | 2<br>7% | 7<br>24% | 3<br>10% |
| Comprehen-sion | 25 | 22<br>88% | 1<br>4% | 2<br>8% | 24 | 17<br>71% | 1<br>4% | | 2<br>8% | 5<br>21% | 4<br>17% |
| 10. Teach skill | | | | | | | | | | | |
| Word Attack | 57 | 55<br>96% | 1<br>2% | 1<br>2% | 56 | 56<br>100% | 16<br>29% | 1<br>2% | 5<br>9% | 7<br>13% | 2<br>4% |
| Study Skills | 34 | 33<br>97% | | 1<br>3% | 34 | 34<br>100% | 7<br>21% | | 5<br>15% | 4<br>12% | 2<br>6% |
| Comprehen-sion | 28 | 26<br>93% | 1<br>4% | 1<br>4% | 26 | 26<br>100% | 6<br>23% | | 2<br>8% | 4<br>15% | 1<br>4% |

TABLE 3 (continued)

| | Respondents Implementing Major Steps Within Each Element | | | | Person(s) Responsible for Implementing Major Steps Within Each Element | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. Resp. | Yes | Some-times | No | No. Resp. | Teacher | Aide | Stds. | IMC | Unit Ldr | Rdg. Person |
| 11. Assess progress of child at each session | | | | | | | | | | | |
| Word Attack | 58 | 21<br>36% | 23<br>40% | 14<br>24% | 46 | 45<br>98% | 6<br>13% | 1<br>2% | 3<br>7% | 4<br>9% | 2<br>4% |
| Study Skills | 32 | 15<br>47% | 12<br>38% | 5<br>16% | 29 | 29<br>100% | 2<br>7% | | 2<br>7% | 3<br>10% | 2<br>7% |
| Comprehen-sion | 25 | 8<br>32% | 9<br>36% | 8<br>32% | 19 | 18<br>95% | 3<br>16% | | 2<br>11% | 2<br>11% | 1<br>5% |
| 12. Posttest after instruction | | | | | | | | | | | |
| Word Attack | 58 | 54<br>93% | 1<br>2% | 3<br>5% | 56 | 56<br>100% | 18<br>32% | | 5<br>9% | 8<br>14% | 2<br>4% |
| Study Skills | 35 | 32<br>91% | 1<br>3% | 2<br>6% | 35 | 35<br>100% | 8<br>23% | | 3<br>9% | 4<br>11% | 2<br>6% |
| Comprehen-sion | 27 | 26<br>96% | | 1<br>4% | 26 | 26<br>100% | 8<br>31% | | 3<br>12% | 4<br>15% | 1<br>4% |

* Numbers do not total to the number responding because respondents indicated that a combination of people were involved in implementing various steps.

TABLE 4 A

Function of Word Attack Element in Overall Reading Program

| | Total No. Responding | Number Responding To Each Category | Percent Responding To Each Category |
|---|---|---|---|
| Basis for Skill Instruction | 57 | 23 | 40 |
| Monitor Skill Development | 57 | 14 | 25 |
| Combination of Basis and Monitor (above) | 57 | 20 | 35 |
| WA incorporated into usual reading time | 55 | 21 | 38 |
| WA is in addition to the usual reading time | 55 | 34 | 62 |

TABLE 4 B

Instructional Approach Used with the Design Word Attack Element in the Overall Reading Program (N = 59)

| | Number of Schools | Percent |
|---|---|---|
| Basal reader approach* | 50 | 85 |
| Ginn | 13 | |
| Houghton Mifflin | 10 | |
| Macmillan | 8 | |
| Lippincott | 5 | |
| Language-experience approach | 9 | 16 |
| Individualized approach | 23 | 39 |

* Four most commonly used basals are reported.

TABLE 5

Respondents' Ratings of Success of Design Implementation

| | Excellent | Good | Moderate | Fair | Poor |
|---|---|---|---|---|---|
| Word Attack | 24 | 17 | 7 | 2 | - |
| 50 responded | 48% | 34% | 14% | 4% | - |
| Study Skills | 8 | 11 | 7 | 4 | - |
| 30 responded | 27% | 37% | 23% | 13% | - |
| Comprehension | 5 | 10 | 7 | 3 | 1 |
| 26 responded | 19% | 38% | 27% | 12% | 4% |
| SDIC | 2 | 3 | 1 | 2 | 2 |
| 10 responded | 20% | 30% | 10% | 20% | 20% |

TABLE 6

Respondents' Ratings of Impact of Design on Teaching of Reading

| | Very Positive | Slightly Positive | No | Negative |
|---|---|---|---|---|
| Word Attack | 38 | 14 | 1 | 1 |
| 54 responded | 70% | 26% | 2% | 2% |
| Study Skills | 19 | 12 | - | - |
| 31 responded | 61% | 39% | - | - |
| Comprehension | 14 | 10 | 1 | - |
| 25 responded | 56% | 40% | 4% | - |
| SDIC | 3 | 5 | 1 | - |
| 9 responded | 33% | 56% | 11% | - |

TABLE 7

Major Problems Implementing the Design
(Based on N = 61)

| | | Number | Percent |
|---|---|---|---|
| 1. | Lack of time for planning | 35 | 57% |
| 2. | Scheduling of students to independent activities after skill mastery | 31 | 51% |
| 3. | Scheduling of students to skill groups | 17 | 28% |
| 4. | Lack of teacher prepared materials | 17 | 28% |
| 5. | Amount of time for testing | 15 | 25% |
| 6. | Lack of commercially produced materials | 14 | 23% |
| 7. | Keeping pupil profile cards up-to-date | 11 | 18% |
| | TOTAL | 140 | |

TABLE 8

Major Advantages of the Design
(Based on 61 Responses)

| | | Number | Percent |
|---|---|---|---|
| 1. | Focus on specific Word Attack skills | 55 | 90% |
| 2. | Increased teacher knowledge of Word Attack skills | 53 | 87% |
| 3. | Increased pupil learning of Word Attack skills | 51 | 84% |
| 4. | Increased individualization | 43 | 70% |
| 5. | Better utilization of instructional materials | 42 | 69% |
| 6. | Increased communication between teachers | 40 | 66% |
| 7. | Increased teacher interest in reading instruction | 34 | 56% |
| 8. | Increased pupil learning of Study Skills | 27 | 44% |
| 9. | Increased pupil learning of Comprehension skills | 23 | 38% |
| | TOTAL | 368 | |